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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/031,136	06/03/2002	Lee Sprague	100746-9/Halocarbon 221	8154

27384 7590 01/17/2006

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EXAMINER

PRICE, ELVIS O

ART UNIT	PAPER NUMBER
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1621

DATE MAILED: 01/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/031,136	Applicant(s) SPRAGUE ET AL.	
	Examiner Elvis O. Price	Art Unit 1621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3, 4, 6-9, 11 and 12 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 5, 10 and 14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/1/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-12 and 14 are pending in the application. Claim 13 has been canceled by applicants in the amendment filed 9/12/05.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Voight et al. {US Pat. 4,898,645}.

Voight et al. disclose a process for preparing an aliphatic fluorocarbon product(s) comprising pyrolyzing an aliphatic fluorocarbon compound (chlorodifluoromethane) to form a reactive aliphatic fluorocarbon intermediate which reacts with another reactive intermediate to form the desired aliphatic fluorocarbon products (see Example 1).

Claims 1, 5, 10 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated over Difelice et al. {Combust. Sci. and Tech., 1996, 116-117 (1-6), pp. 5-30; abstract only}.

Difelice et al. disclose a process for preparing 1,1,1,2,3,4,4,4-octafluoro-2-butene (perfluoro-2-butene) comprising pyrolyzing 1-chloro-1,2,2,2-tetrafluoroethane (2-chloro-1,1,1,2-tetrafluoroethane) (see abstract). Difelice et al., also disclose a process for preparing 1,1-dichloro-1,2,2,2-tetrafluoroethane (CFCl₂CF₃) comprising pyrolyzing 1-chloro-1,2,2,2-tetrafluoroethane (2-chloro-1,1,1,2-tetrafluoroethane) (see abstract).

Response to Arguments

Applicants' amendments/arguments, filed 9/12/05, have been fully considered but they are not persuasive.

Applicants argue that steps c) and d) are now mandatory, as evidenced by the amendment of the present claim 1, because the reference to the language "optionally" has been removed.

This argument is not convincing because the production of undesired aliphatic fluorocarbon products only results from an alternative process route, included in step b), wherein an intermediate is produced (instead of the desired aliphatic fluorocarbon product) which ultimately leads to the desired product and some undesired aliphatic fluorocarbon products (see line 3 of step b. in claim 1 where the alternative language "or" is recited). Hence, the undesired aliphatic fluorocarbon products need not be produced to still arrive at the desired aliphatic fluorocarbon product. Thus, process steps c) and d), as recited in the present claim 1, by default are not mandatory. Therefore the prior art as applied above still reads on the presently claimed invention.

Allowable Subject Matter

The following is a statement of reasons for the indication of allowable subject matter: Claims 3, 4, 6, 7-9, 11 and 12 are unobvious over the prior art of record because the prior art of record does not teach or suggest preparing the recited fluorinated compounds by pyrolyzing the recited halogenated starting reactants or preparing the recited fluorinated compounds in greater than 50% yield.

Applicants' amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elvis O. Price whose telephone number is 571 272-0644. The examiner can normally be reached on 8:30 am to 5:00 pm; Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann R. Richter can be reached on 571 272-0646. The fax phone numbers for the organization where this application or proceeding is assigned is 571 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308-1235.

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A handwritten signature in black ink, appearing to read 'Elvis O. Price', with a large, stylized initial 'E' and 'P'.

Elvis O. Price

January 10, 2006